FOR CPRS GUI VERSION 22 PATCH# OR*3.0*173

INSTALLATION REQUIREMENTS

Before you can install OR*3.0*173, you must install the following patches:

- OR*3.0*149
- OR*3.0*165
- TIU*1.0*160
- TIU*1.0*164

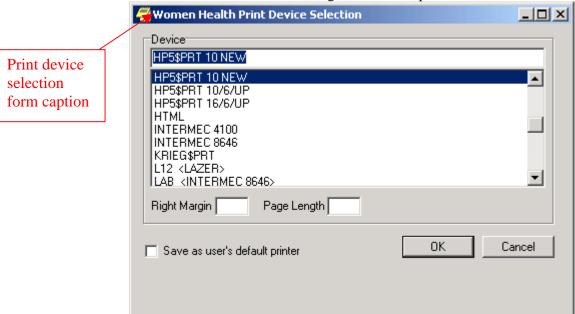
NOTE: Internet Explorer 4.0 (IE4) or later is REQUIRED in order for GUI version 22 to run. However, IE 5.5 or later with 128-bit encryption is required for PKI functionality.

NEW FUNCTIONALITY

Clinical Reminders

- E3R 15758 Previously, if you had dialog elements with the checkbox suppress and a finding item, CPRS would check to see if would display the items in the progress note if it had a finding item even if the item was designated with Exclude from Progress Note. A post install routine is included in this patch that correct this. CPRS will now honor the Exclude from Progress Note parameter as it should.
- Women's Health Dialog Prompts The developers added two new dialog prompts and processing logic for the Women's Health project to Clinical Reminders. These dialog prompts will be not display in the GUI until the server-side patch either (PXRM*2.0*1 or PXRM*2.0*2) is released.
- Women's Health Value to Progress Note The developers changed Progress
 Note Text functionality to allow a Women's Health Force Value to populate the
 progress note text. This change will not be displayed until the Women's Health
 patch is released.

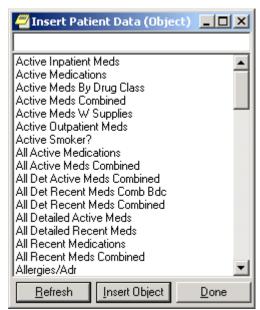
• **Customize Form Caption** - The developers changed the SelectDevice Function Call to accept a fourth parameter so that the caption on the print device form can be customized. This internal change is for developer use.



Developers can now change the Print Device selection caption to be more specific.

TIU

Patient Data Object Refresh Button - Developers added a new Refresh button
to the Patient Data Object form to allow users that edit data objects to more
quickly see their changes.



Objects can now be refreshed from this form.

- **80 Character Width for TIU Documents** Developers changed the progress note to wrap at 80 characters this will require a TIU patch for objects.
- Printing Multiple Notes, Consults, or DC/Summaries The ability to print multiple Progress Notes, Consults, or Discharge Summaries has been added to the CPRS GUI. When on the Notes, Consults, or DC Summ tabs, a new option under the file menu "Print Selected Items" will be available. If the user selects this option, a list of the appropriate documents for that tab appears. The user can use Ctrl + Click to select specific documents to add to the items to be printed or Shift + Click to select a range of documents to be printed. Sorting has been set by date in the multiple selection window.

Problems

• Multiple Problem Selection for Inactivate and Verify Actions – Developers made changes that enable users to make multiple selections on the problems tab for the Inactivate and Verify actions.

CCOW (Clinical Context Management)

- Context Synchronization Changes have been made that make CPRS GUI V.22 compliant with the CCOW standard. This functionality requires installation of Sentillion's Vergence Desktop Components on each user workstation and that the workstation communicate with a context vault that will track context for each workstation. If these components are installed, any other CCOW-compliant application on that desktop will automatically synchronize with the CPRS selected patient. Also, if the user selects a different patient in any such application, the other applications, including CPRS, will automatically synchronize with that same patient. The user can also choose to join or break from the context synchronization. If the Vergence components are not installed, CPRS will continue to operate as it currently does. Installation of this component is not required for normal non-CCOW CPRS operation.
- Error Message Corrected During testing, it was discovered that an issue could occur where the user would be warned about loss of encounter data being edited on a proposed context change, even though the encounter form was not currently in use. This has been corrected.

HIPAA Code Set Versioning (CSV)

• CSV Support - All required changes to the GUI to support the later implementation of Code Set Versioning (CSV) have been included in this release. Users should see no changes until the required ICD, ICPT, LEX, and IBD patches are installed later this year. At that time, codes and vocabulary terms will be checked and screened for date currency, and some changes to GUI behavior will be noted. The changes have been included now to facilitate testing and readiness for the fall 2003 implementation deadline. Documentation of the GUI changes will be forthcoming as CSV implementation approaches.

Notification / Alerts

- New Columnar Notification Format and Sorting The notification/alerts
 display on the patient selection screen has been changed to a columnar format.
 Users can now click on any column heading to sort notifications by that heading.
 Clicking again on the heading will reverse sort by that heading. The new column headings for Notification/Alerts include:
 - o Info (information alerts are preceded with an "I")
 - Patient name
 - o Location (patient location if known)
 - Urgency (valued HIGH, Moderate, or low as indicated by the CPRS parameter ORB URGENCY. TIU alerts are given a Moderate urgency value.
 Other alerts without a parameter value are given an urgency of low.)
 - Alert Date/Time (date/time the alert was triggered)
 - o Message (alert message or text)
 - o Forwarded By/When
- New Actions for Notifications/Alerts Two new buttons, Remove and Forward, have been added to the Notification/Alert display. In addition, the Next button that appears in the status bar (bottom of screen) when alerts are being processed now has a pop-up menu. This menu appears when you right-click on the Next button. The pop-up supports the following actions: "Continue," "Forward," and "Renew."
- Forwarded Alert Comments Developers added comments for forwarded alerts to the alert list on the patient selection screen. If a forwarded alert has comments from the forwarding person, those comments will be displayed when the cursor hovers over the forwarded alert. To support longer comments, the Forwarding Alerts screen now has a larger comments section. Comments are limited to 180 characters to support display on the alerts screen.
- New Forwarded By/When Column A new column "Forwarded By/When" has been added to display who forwarded the alert and when (if applicable.) Like other columns on the new alerts list, the Forwarded By/When column supports sorting. This will allow users to sort alerts by who forwarded them.

MEDS

• Controlling Medication Date Range in CPRS GUI - Previously, the parameter ORCH CONTEXT MEDS controlled the date range for Medications displayed in List Manager, but the parameter did not affect the CPRS GUI. This has been corrected. Users can now set the date range for medications displayed on the MEDS Tab by selecting Tools | Options | General Tab | Other parameters.

Patient Record Flags

• Support for Display of Patient Record Flags – Developers include in this release the required CPRS GUI changes to display Patient Record Flags (PRF). However, the inclusion will be transparent until the appropriate patch from MSS Major Enhancement package is installed. If the MSS API is present when doing patient selection, a button will display to tell the user whether the patient has patient record flags to view. The user can click on the button to see what types of flags the selected patient has, and can choose to view the flag narrative, which is a brief description of the type of flag and any recommended actions. Currently, there is one Category I or national flag, a behavioral flag concerning violent or potential violent patients and Category II or local flags that sites will create, but will not be transmitted to other sites. If the MSS API is not available, CPRS will function as it has in the past. Users will see no difference.

BUG FIXES

Orders

 Patient Safety Issue: "Give First Dose Now" Option NOIS - UNY-0103-12484

 SFC-0103-61604

 E3R - 17795

 16766

"Give First Dose Now" resulted in several medication errors since its introduction in CPRS. Based on the CPRS Clinical workgroup recommendations, the following changes were made to address this issue.

- 1. The wording "Give First Dose Now" will be changed to "Give Additional Dose Now".
- 2. "Give Additional Dose Now" option will not be available for a free-text order.
- 3. When the provider chooses "Give Additional Dose Now," CPRS will display an information box that tells the provider that this action has created two orders for the same medication and each order has its own administration schedule.

Patient Safety Issue: Order Comment

NOIS – WAS-1102-22142 WAS-0303-20992 HUN-1100-22441

The purpose of the order comments field is ambiguous to users and has been used for various purposes, some of which might endanger patient safety if not seen. Based CPRS Clinical Workgroup's recommendation, the developers disabled the "Order Comments" function and locked out the field.

- Co-pay Problem for Renew, Change and Copy action (NOIS ELP-0303-71667)
 Previously, when renewing, changing, or copying an existing co-pay eligible order, if the patient's current co-pay exemption changed, the new order still used the old order's co-pay exemptions for order signing instead of the new one's. This has been fixed.
- Changed Order Signature Hotkey to Match Notes Developers changed the Order Signature Hotkey to <Alt-A+G> to match behavior of Notes tab.
- Incorrect Display of Date/Time on Auto DC/Release Event Orders (NOIS TNV-0403-31555) On the Orders tab, when a user selected the View menu and then the Auto DC/Release Event Orders option, all the events date/time ended with same hour and minute values regardless of the actual event times. This is fixed.
- Complex Order Not Displaying on Time When renewing a complex order from the Meds Tab, the renewed order did not show up on the order list until the review/sign window displayed. This is fixed.
- **Transfer Event Name Not Showing Correctly** For transfer event, the event name did not show in event box of the event default dialog. This is fixed.
- Corrected Listbox Error Developers corrected an error that was caused by typing in listbox of the Change Release Event screen if no release events are available.
- **Multiple Order Dialogs Displaying** If a user double-clicked a quick order in an order menu, CPRS would display two order dialogs--one of the two is blank. This has been fixed.
- Access Violation with Consults Ordering on Orders Tab Developers corrected an access violation that was specifically reported as occurring when opening certain quick order dialogs from the "Write Orders" list on the Orders tab.
- Error on Some Nursing Orders Developers fixed a "Class Tmemo not found" error that would sometimes appear when miscellaneous order dialog displayed.

Corrected Radiology Ordering Error - If a user created a personal quick order
using an orderable item that also appeared on the RADIOLOGY COMMON
PROCEDURES list in the middle section of the combo box, subsequent selection
of that personal quick order would select the incorrect orderable item from the
combo box, and create an order for the incorrect exam type. This has been
corrected.

Problems Tab

- **Problems Tab Access Violation** If CPRS timed out while the problem add/edit screen was open, an access violation would result. This has been corrected.
- **Problems Tab Access Violation Revisited** Developers corrected an issue where timing out while the problem editing screen was visible produced an access violation. This was originally reported as fixed in v22.7, but site testing revealed more work was needed.
- Additional Access Violation Corrected This is a different access violation than the one reported earlier. This one occurred on timeout when the problem lexicon lookup screen is open. This has been fixed.
- Corrected a Problem with Inactivate and Verify of Multiple Problems The Inactivate and Verify menu options will now be enabled if ANY of the selected problems is in a state where that action can be taken. Previously, ALL selected problems had to pass that test before the menu would be enabled.

Meds Tab

- Administration History for IV Orders Previously, the administration history
 of IV orders could not be retrieved and displayed correctly in CPRS and the
 function was disabled. Now, the problem has been corrected and the function is
 enabled.
- Active Medication Order Chart Locking Issue (NOIS MAC-0603-61111) If a user copied an active medication order, then signed and released the new order yet still remained in the CPRS session, pharmacy was not able to process it due to locking issues. This was fixed.

Notes / Consults / Discharge Summary / Surgery

- Server Error When Attempt to Save a TIU Document Fails
 - NOIS CHA-0403-30277
 - PUG-0403-51353
 - FNC-0503-30038
 - MOU-0503-30380

Under certain circumstances, the TIU call to save the document can fail and return an error message. CPRS was not correctly processing this error message and the result would be a hard server error at PATVADPT+4^TIULV, because a second call to store the text of the document would pass a document IEN of "0". In this version, the existing error message returned by TIU is displayed to the user, and the second call is bypassed. This prevents the server error that would result further downstream in the update process. Investigation continues as to the underlying cause for this scenario.

- Template Remaining Selected The Templates treeview maintains its selection even after the note being edited is saved or signed. When starting a new note, the previous template remains selected in the treeview, whether or not the templates drawer is open. When then starting another new note, and selecting "Preview/Print Selected Template" from the note's popup menu, the template previously selected and used would be displayed, which confused the users. In this version, that menu will not be available unless the templates drawer is actually open, showing that a template is currently highlighted.
- Corrected Problem When Importing an Inactive Template When importing
 a template with a status of inactive, if the "Hide Inactive" checkbox was checked
 the error "Cannot focus a disabled or invisible window" would sometimes
 appear. Subsequent attempts to re-import the template would then cause an
 access violation. This has been fixed.

Notes Tab

- One Note Per Visit (NOIS TAM-0300-33000) Added functionality to GUI that is provided in List Manager Version of CPRS. This functionality insures a Note with its Document Parameter (allow >1 records per visit: NO) can only exist once per visit.
- Patient Safety Issue: Inactive User Added functionality that will determine a users status when selected to be a co-signer, or an additional signer for a Note or Consult. If the user is DISUSERED, the appropriate message will be displayed.
- Allow Users to Deselect Default Template (PUG-0202-50989) Developers added code to enable users to deselect/toggle of default template.

- Warning Different in CPRS GUI vs. CPRS List Manager (NOIS: UNY-0103-12484) Currently in CPRS when a provider creates a note and the note requires a co-signature, the co-signer can sign the note prior to the author signing. In List Manager, the following happens when the co-signer selects a note for signature prior to the author signing, the co-signer is prompted with a message stating: "Author hasn't signed, are you SURE you want to sign Provider A NOTE?" and must answer Yes or No. If the Co-signer responds No, the user exits the note without signing. If the Co-signer responds "Yes", the Co-signer is allowed to sign the note. This functionality has been added to CPRS GUI.
- **Resizing Fix** The Notes properties form used for selecting a new note title now resizes correctly for 24pt font size.
- Consult Request Field Fix (NOIS LAS-0901-60562) The Consult Reason For Request is no longer inverted.
- Unresolved Consult Screen Correction In v22.4, developers changed the unresolved consults reminder screen to make it JAWS-readable. This change inadvertently left that screen with only an "OK" button instead of the intended "YES" and "NO" buttons. Additionally, the OK button did not display the list of unresolved consults. This has been fixed.

Consults

- Unreadable Medicine Package Results When users attach or detach Medicine package results to a procedure request, the items in the available results to attach or detach lists were not behaving correctly with larger font sizes, making the text unreadable. This has been corrected.
- Missing Consult Document Titles Fix A problem was reported with the title selection list for the Consults document class. Not all available titles were displaying in the list. This has been corrected.
- Consult or Procedure Error SVCIEN+2^ORQQCN2 Fix Under certain circumstances in the consult or procedure ordering process, a server error at SVCIEN+2^ORQQCN2 would occur. This has been corrected.
- **Text Correction on Add Comment Action** Developers corrected the text of alert recipients on the "Add comment" action from "update users" to "notification recipients" for the service.

Vitals

- **Graphing Weight (NOIS MWV-0103-22037)** Added a function to force users to enter a numeric weight so that graphing would work correctly.
- Corrected Invalid Typecast Error When entering vitals from the cover sheet and moving between fields using the ENTER key instead of TAB, an "invalid typecast" error would occur. This has been fixed.

Encounters

- Encounter Form Date Range (NOIS LEX-1001-42510) Modified Encounter form to utilize user's saved clinic appointment date range parameters instead of previously hard-coded range of 30 days.
- Encounter Form "List Out of Bounds" Error When users would edit an encounter that already had procedures attached, the addition of the first new procedure after opening the encounter form would produce a "List Index Out of Bounds" error. Subsequent additions without closing and reopening the form would not produce the error. This has been corrected.

Notifications/Alerts

• Order Requires Elec Signature Notification/Alert Not Being Triggered – For this alert, the Notifications routines automatically check orders on the unsigned order list. If you click the "Don't Sign" button while unsigned orders are checked, the alert will not trigger. If you uncheck the unsigned orders before clicking the "Don't Sign" button, the alert triggers. The fix will now trigger the alert in both cases.

Section 508 Changes

- **Corrected Dialog Box Labels** Developers changed several dialog boxes to have text readable by text-to-speech utilities.
- **Section 508 Disclaimer** Developers added 508 disclaimers to the splash screen and the Help | About box.
- Complex Medication Field Editor Now Uses Default Pressing the space bar
 while in the complex medication grid brought up the appropriate field editor with
 no default value. This has been fixed so that the old value of the field is used as
 the default value for the field editor.
- **Problems List Tab Order Change** The tab order has been changed so that the list of active problems comes directly after the problem categories list.

• **Progress Notes Tab Order Change** - The tab order has been changed so that the note editor comes directly after the list of notes.

Patient Selection Screen

- **Reminder Button Display Fix** Developers fixed a problem that could hide Reminder buttons behind the Windows tool bar.
- **Select New Patient Button Fix** On the "Patient Inquiry" screen, the "Select New Patient" button was not displaying the Patient Selection screen. This has been fixed.
- Room and Bed Information Display Fix (NOIS PUG-0400-50702) When first setting a Ward as the default Patient List, room and bed information showed, but upon subsequent list window appearances it did not. This was fixed.

Spell / Grammar Checker

• The spell-checker was terminating abnormally (but safely) if the first line of the document being checked was a blank line or if the first line contains nothing but spaces. This has been corrected.

Icon Legends

• **Incomplete Icon Legend Text Display** - The text on the Icon Legend was not always displaying completely in v21. This has been fixed

Tools

- Cannot Focus Invisible Window Fix If a user selected Tools | Options, Reports, Set Individual Reports, and then selected a date to change and pressed <Enter> to bring up the calendar, when the user closed the calendar dialog, an error message reading "Cannot focus invisible window" would display the This has been corrected.
- Coversheet Reminder Error Under Tools | Options Developers fixed a "Class Tmemo not found" error that would sometimes appear when option screen displayed.

Event Capture Interface Corrections
 NOIS - DET-0603-41993
 - ERI-1202-21387

Inside CPRS, the "Event Capture Interface" users were not able to save the customized application path for the multi-sessions reuse. This was fixed.

For sites using the "Event Capture Interface", when accessing the "CPRS GUI TOOLS MENU" option, IRM will need to add a new entry at the system level or other appropriate level to store the default ECS path (Event Capture Interface="path...\ECS GUI.EXE") for the parameter "ORWT TOOLS MENU". You need to be sure that the application name is exactly same as the words "Event Capture Interface". For an individual CPRS ECS user, if the ECS path is different from the default path, the user can manually browse to find the right path for future reuse.

Patient Information Bar

• Corrected Display Problem – The button text is no longer cut off when using larger fonts.